

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF LOUISIANA
LAFAYETTE DIVISION

DARRYL HOUSER

CASE NO. 6:20-CV-00197

VERSUS

JUDGE SUMMERHAYS

OCEANEERING INTERNATIONAL INC.

MAG. JUDGE WHITEHURST

MEMORANDUM RULING

Pending before the undersigned magistrate judge are two motions filed by the defendant Oceaneering International, Inc. (“hereinafter, “defendant”), as follows: (1) Motion in Limine to Exclude YouTube Videos of Other Bottles Exploding [Doc. 30] and (2) Motion in Limine to Exclude Certain Video Audio Samples [Doc. 31]. Both motions are opposed [Docs. 37 & 36, respectively], and reply briefs were filed in response to each opposition [Docs. 40 & 39, respectively]. Additionally, plaintiff filed two sur-replies to the instant motions [Docs. 47 & 46, respectively]. Plaintiff’s Motion for Leave to File Supplement to Sur-Reply Memorandum in Opposition to Defendant’s Motion in Limine [Doc. 52] is DENIED. For the following reasons, the Motion in Limine to Exclude YouTube Videos of Other Bottles Exploding [Doc.

30] is GRANTED, and the Motion in Limine to Exclude Certain Video Audio Samples [Doc. 31] is DENIED.

FACTUAL AND PROCEDURAL BACKGROUND

The instant litigation arises out of an alleged incident that occurred on February 28, 2019. The plaintiff, an employee of defendant Oceaneering, alleges that he was injured when “. . . an improperly sealed plastic water bottle ascending from approximately 380’ of sea water in an equipment locker near plaintiff’s head after he opened the saturation equipment lock to remove equipment out of the lock.”¹ The plaintiff alleges that he suffered disabling tinnitus in both ears, as well as vestibular injury, as a result of this blast injury when the water bottle exploded near his head.

LAW AND ANALYSIS

1. Motion in Limine to Exclude YouTube Videos of Other Bottles Exploding [Doc. 30]

During the course of discovery, the plaintiff revealed that he was in possession of a link to a YouTube video of a plastic bottle exploding due to air pressure being

¹ See plaintiff’s opposition brief, Doc. 36, at p. 2.

pumped into the plastic bottle. The YouTube video features a test conducted by a television presenter on the BBC network in 2010.² The plaintiff has indicated that, after laying a proper foundation for the video, he intends to offer the video at trial as evidence, either through plaintiff's testimony or the testimony of an expert witness. In the instant motion, the defendant seeks to exclude this YouTube video at trial, as well as any testimony based on the video, on grounds that a proper foundation cannot be laid for the video, which is unfairly prejudicial and of no probative value.

Both parties agree that the admissibility of expert testimony is governed by Rule 702 of the Federal Rules of Evidence, which provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

(a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;

(b) the testimony is based on sufficient facts or data;

(c) the testimony is the product of reliable principles and methods; and

² A webpage link was provided to the undersigned for an *in camera* inspection in connection with the pending motion, which has been conducted.

(d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702. In *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, the Supreme Court instructed courts to function as gatekeepers, and determine whether expert testimony should be presented to the jury. 509 U.S. 579, 590–93, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993). Courts act as gatekeepers of expert testimony “to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.” *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152, 119 S.Ct. 1167, 143 L.Ed.2d 238 (1999).

The party offering the expert's testimony has the burden to prove that: (1) the expert is qualified; (2) the testimony is relevant to an issue in the case; and (3) the testimony is reliable. *Daubert*, 509 U.S. at 590–91, 113 S.Ct. 2786. A proffered expert witness is qualified to testify by virtue of his or her “knowledge, skill, experience, training, or education.” Fed. R. Evid. 702. Moreover, to be admissible, expert testimony must be “not only relevant but reliable.” *Daubert*, 509 U.S. at 589, 113 S.Ct. 2786. “This gate-keeping obligation applies to all types of

expert testimony, not just scientific testimony.” *Pipitone v. Biomatrix, Inc.*, 288 F.3d 239, 244 (5th Cir. 2002), *citing Kumho*, 526 U.S. at 147, 119 S.Ct. 1167.

In *Daubert*, the Supreme Court offered the following, non-exclusive list of factors that courts may use when evaluating the reliability of expert testimony: (1) whether the expert's theory or technique can be or has been tested; (2) whether the theory or technique has been subjected to peer review and publication; (3) the known or potential rate of error of the challenged method; and (4) whether the theory or technique is generally accepted in the relevant scientific community. *Id.* at 593–94, 113 S.Ct. 2786; *Pipitone*, 288 F.3d at 244. When evaluating *Daubert* challenges, courts focus “on [the experts’] principles and methodology, not on the conclusions that [the experts] generate.” *Daubert*, 509 U.S. at 595, 113 S.Ct. 2786.

The *Daubert* factors are not “a definitive checklist or test.” *Id.* at 593, 113 S.Ct. 2786. As the Supreme Court has emphasized, the *Daubert* framework is “a flexible one.” *Id.* at 594, 113 S.Ct. 2786. The test for determining reliability can adapt to the particular circumstances underlying the testimony at issue. *Kumho*, 526 U.S. at 152, 119 S.Ct. 1167. Accordingly, the decision to allow or exclude experts from testifying under *Daubert* is committed to the sound discretion of the

district court. *St. Martin v. Mobil Expl. & Producing U.S., Inc.*, 224 F.3d 402, 405 (5th Cir. 2000) (citations omitted).

The foregoing rules unquestioningly apply in jury trials, however the Fifth Circuit has indicated that most of the safeguards provided for in *Daubert* are not as essential in a case such as this where a district judge sits as the trier of fact in place of a jury. *See, e.g., Gibbs v. Gibbs*, 210 F.3d 491, 500 (5th Cir. 2000). *See also Whitehouse Hotel Ltd. P'ship v. Comm'r*, 615 F.3d 321, 330 (5th Cir. 2010) (when there is no jury, “there is no risk of tainting the trial by exposing a jury to unreliable evidence.”). Nevertheless, it is clear that the *Daubert* standards of relevance and reliability for scientific evidence must nevertheless be met in bench trial cases. *Seaboard Lumber Co. v. United States*, 308 F.3d 1283, 1302 (Fed. Cir. 2002).

As stated herein, as a general rule, district courts have wide discretion to admit evidence of experimental tests. *Barnes v. General Motors Corp.*, 547 F.2d 275, 277 (5th Cir. 1977). When the evidence sought to be excluded is a test or experiment, the standard for admissibility turns on what the experiment is intended to demonstrate. If the test or experiment is meant to be a simulation or re-creation of what actually happened, it must be performed under “substantially similar conditions.” *Id.* In that case, “the burden is upon the party offering evidence of

out-of-court experiments to lay a proper foundation demonstrating a similarity of circumstances and conditions.” *Id.* While an experiment need not “precisely reproduce[]” every condition, it must be “so nearly the same in substantial particulars as to afford a fair comparison in respect to the particular issue to which the test is directed.” *Id.* By contrast, “[i]f a party offers the demonstrative evidence only as an illustration of general scientific principles, ... it need not pass this ‘substantial similarity’ test.” *McCune v. Graco Children's Products, Inc.*, 495 F. App'x 535, 540 (5th Cir. 2012) (unpublished); *see also Muth v. Ford Motor Co.*, 461 F.3d 557, 566 (5th Cir. 2006). Moreover, the district court may still exclude demonstrative evidence if the danger of unfair prejudice or confusion posed by the evidence substantially outweighs its probative value. *See Fed. R. Evid.* 403; *McCune*, 495 F. App'x at 540.

In this case, although the plaintiff argues otherwise, the Court finds that the test/experiment depicted in the YouTube video is intended to represent a simulation or re-creation of the accident (or of the sound of the accident) giving rise to the plaintiff's injuries. The plaintiff has described the video as “depicting the physical

mechanisms that are involved in a bottle explosion such as the subject incident.”³ Additionally, in response to the defendant’s motion, the plaintiff argues that the video has relevance because it “will assist the Court in understanding the trial testimony regarding the forces and mechanisms that acted on Petitioner during the subject incident, resulting in Petitioner’s injuries and damages.”⁴ In other words, the plaintiff seeks to introduce the video to show that it is “more probable that the [plaintiff] suffered a significant blast-wave type injury.”⁵ The fact that some scientific principles of some kind may be demonstrated, however, does not justify admissibility unless the “substantial similarity” standard is satisfied.

The plaintiff cannot show substantial similarity here. No witness will be able to testify regarding the test parameters; the materials used in the test; or the pressures at issue in the test. There is no witness who will be able to demonstrate that the circumstances under which the YouTube test was conducted are substantially similar to the plaintiff’s accident. Unknown facts related to the YouTube video include the

³ See Memorandum in Opposition to defendant’s Motion in Limine, at Doc. 37, p. 3.

⁴ *Id.* at p. 8.

⁵ *Id.* at pp. 7-8.

type of bottle involved in the experiment; the volume of the bottle involved; the pressure applied at the point of failure; and/or the location of the microphone that recorded the sound, all issues raised by the defendant in its motion. There is simply no one who can verify or testify to the conditions under which the YouTube video test was undertaken. See, e.g., *Burchfield v. CSX Transp., Inc.*, 636 F.3d 1330, 1337 (11th Cir. 2011) (where defendant attempted to lay proper foundation for admission of test video, but testimony did not establish similarity of conditions between the testing on the video and the accident, video was inadmissible). Cf. *United States v. Spoerke*, 568 F.3d 1236, 1249–50 (11th Cir.2009) (finding that the district court did not abuse its discretion in admitting videos of pipe bombs exploding where the government offered testimony of the explosives expert who constructed the pipe bombs stating that the devices on the video were virtually identical to those used by the defendant).

The plaintiff suggests that because the defendant cannot offer any proof that the “conditions” under which the video’s exploding bottle experiment were conducted are different than the conditions under which the plaintiff was injured, the defendant is not entitled to exclusion of the video. The plaintiff’s focus, and assignment of the burden, are misplaced. Under *Barnes*, the burden is upon the

party offering evidence of out-of-court experiments – here, the plaintiff -- to lay a proper foundation demonstrating a similarity of circumstances and conditions. 547 F.2d at 277, citing *Navajo Freight Lines v. Mahaffy*, 174 F.2d 305, 310 (10th Cir. 1949). Therefore, it is the plaintiff who must demonstrate that the conditions underlying both the YouTube test video and the plaintiff’s accident are substantially similar.

In an attempt to cross the threshold of the easier standard – where the evidence is demonstrative only and is used to illustrate general scientific principles -- the plaintiff argues that the test/experiment depicted in the YouTube video is not meant to be a simulation or recreation of what actually happened to the plaintiff at the time of his accident. The plaintiff argues that Dr. Gianoli, plaintiff’s treating neurotologist, will testify that, based upon his professional medical expertise, experience, education, and training, the exploding bottle video “fairly and accurately depicts the physical forces and mechanisms involved in the subject incident, where the [plaintiff] was injured by an exploding pressurized bottle.” The Court finds that even under the less stringent standard applied to demonstrative evidence, the video at issue should be excluded.

The YouTube video features a bottle of unknown composition and the test/experiment was performed under largely unknown conditions. Additionally, there is no witness who will be available at trial subject to cross examination regarding the video. Because neither the plaintiff nor his expert has personal knowledge regarding the circumstances under which the video was taken, the plaintiff will not be able to sustain his burden of showing that the test/experiment depicted in the video is a fair and accurate depiction or representation of whatever it purports to depict or represent.

Furthermore, even if the video has some marginal relevancy, the risk of prejudice substantially outweighs any probative value, thus justifying its exclusion under Federal Rule of Evidence 403. Indeed, the probative value of the video is very limited. The factual scenario of the incident – the explosion of the bottle – can be explained at trial by the plaintiff without the use of the YouTube video. The undersigned finds that the judge in this matter will be able to understand the mechanics of a bottle exploding near the plaintiff's head without the aid of a video. The potential prejudice to the defendant, however, is great.

Therefore, for the foregoing reasons, the undersigned concludes that the YouTube test/experiment lacks a proper foundation, has little probative value to this

action and is not admissible at trial. Consequently, the Motion in Limine to Exclude YouTube Videos of Other Bottles Exploding [Doc. 30] is GRANTED.

2. Motion in Limine to Exclude Certain Video Audio Samples [Doc. 31]

Dr. Gerard Gianoli, the plaintiff's treating neurotologist, has performed multiple diagnostic tests on the plaintiff to determine the nature, extent, and severity of the plaintiff's injuries. As explained in the plaintiff's opposition brief, one of these tests is a tinnitus⁶ pitch match test. In January 31, 2022 Report, which includes a February 3, 2021 Tinnitus Assessment, Dr. Gianoli explains that tinnitus pitch match is completed "using a pure tone stimulus at the patient['s] subjective MCL (most comfortable level)." ⁷ In Dr. Gianoli's records, he reports that plaintiff's Tinnitus Assessment revealed that the plaintiff's tinnitus pitch matching

⁶ Tinnitus is defined as a "sound in one ear or both ears, such as buzzing, ringing, or whistling, occurring without an external stimulus and usually caused by a specific condition, such as an ear infection, the use of certain drugs, a blocked auditory tube or canal, or a head injury. *Loza v Apfel*, 219 F.3d 378, 382 (5th Cir. 2000), citing *The American Heritage Dictionary of the English Language* 1879 (3rd ed.1992); see also *Stedman's Medical Dictionary* 1816 (26th ed.1995).

⁷ See Dr. Gianoli's January 31, 2022 Report, attached as Exhibit 4 to plaintiff's Memorandum in Opposition to defendant's Motion to Exclude the Audio, Doc. 36.

approximated 8,000 Hz bilaterally.⁸ In connection with this expert report, Dr. Gianoli included “for demonstration purposes” an 8,000 Hz video (audio) file regarding the plaintiff’s tinnitus pitch match test (hereinafter referred to as the “8,000 Hz file”). That Hz file was produced to the defendant during discovery. In the instant motion, the defendant seeks to exclude both the 8,000 Hz file, as well as any testimony based thereon, on grounds the results of pure tone testing are unreliable in that it is entirely subjective. Consequently, the defendant argues that the 8,000 Hz file lacks a proper foundation, is unfairly prejudicial, and lacks probative value.

As with the motion to exclude the YouTube video, Rule 702 governs the admissibility of expert testimony regarding the 8,000 Hz file and any expert testimony related to that file. Applying the *Daubert* factors, the defendant argues that Dr. Gianoli’s testimony as to the purported sound reproduction should be excluded because 1) his testimony is based on insufficient facts and data; 2) this testimony is a product of unreliable principles and methods; 3) his testimony does

⁸ *Id.*

not assist the trier of fact, through the application of special expertise, to understand the evidence or to determine a fact at issue; and 4) the prejudicial effect of this testimony outweighs its probative value. The crux of the defendant's argument is that there is no objective scientific methodology whereby to test the accuracy of the results of tinnitus pitch matching, and that pure tone testing is completely subjective, with no way to verify the results. In support of this argument, the defendant cites to scientific articles calling into question the accuracy of tinnitus pitch matching.⁹

Plaintiff responds that the pitch match test is an objective method of determining whether an individual has tinnitus, as well as tinnitus extent and severity, and the fact that there is subjective input into the testing – i.e., an individual's perception that the tones he is hearing during the test approximate the tones of the ringing or other sounds he hears in his ears – does not render the pitch match testing inadmissible.

⁹ See, e.g., Garnet P. McMillan, et al., *A Bayesian Perspective on Tinnitus Pitch Matching*, 35(6) EAR HEAR 687, 687 (2014) (“Though widely used, pitch matching is heavily criticized as unreliable, and the degree of reliability varies among patients. At the very least, it is recommended that multiple pitch matches be used to identify the patient's tinnitus frequency.”).

Neither party cites to any cases directed specifically to the issue of the admissibility of pitch match testing, and there may well be a dearth of cases addressing this subject. Nevertheless, tinnitus is a diagnosed and medically accepted impairment, for which medical protocols and treatment are well defined.¹⁰ Thus, this Court undertakes the *Daubert* analysis in this case with an understanding that tinnitus is a medically determinable impairment capable of being diagnosed and tested.

Under Rule 702 and *Daubert*, this Court must first determine whether the proffered testimony -- the 8,000 Hz file and any testimony related to it -- is reliable, requiring an assessment of whether the reasoning or methodology underlying the

¹⁰ In *In re 3M Combat Arms Earplug Prod. Liab. Litig.*, 2021 WL 4132269 , at *2 (N. D. Fla. Sept. 12, 2021), a multi-district litigation case concerning hearing loss and tinnitus caused by defective earplugs, the court noted:

The only exception is tinnitus, the diagnostic process for which is far more advanced than, and readily distinguishable from, the other categories of hidden hearing loss. Tinnitus has well-established and universally applied diagnostic criteria, protocols for measuring a patient's subjective perception of tinnitus sound, pitch, and volume (e.g., pitch and loudness matching, minimum masking levels, residual inhibition), questionnaires for measuring the subjective burden of a person's tinnitus (e.g., Tinnitus Handicap Inventory, Tinnitus Functional Index), and a unique International Classification of Disease (ICD) code (H93.1). Moreover, its diagnostic reliability has never been challenged in this litigation.

testimony is scientifically valid. Second, the district judge must determine whether that reasoning or methodology can be properly applied to the facts in issue; that is, whether it is relevant. *Curtis v. M&S Petroleum, Inc.*, 174 F.3d 661, 668 (5th Cir. 1999), *citing Daubert*, 509 U.S. at 592–93, 113 S.Ct. at 2796.

In this case, it is clear that tinnitus is a medically accepted diagnosis, and the defendant does not argue otherwise. Nor does the defendant argue that Dr. Gianoli is not qualified to diagnose and/or treat tinnitus. Rather, the defendant argues that because pitch matching requires a subjective component – the plaintiff must indicate to the tester that the tone he is hearing “matches” the tone of his tinnitus -- the testing is not reliable. The defendant’s argument is unpersuasive. The defendant does not argue that there are testing techniques that are superior to pitch matching. Even according to the scientific article referenced by the defendant, pitch matching is acknowledged to be a “widely used” test to both diagnose and measure tinnitus. That some experts consider pitch matching to be unreliable – despite being widely used – does not render the testing inadmissible. The court in *3M Combat Arms* explained this rationale as follows:

From a legal perspective, scientific evidence conclusively proving the precise pathophysiological means by which an agent—say, noise—causes a particular condition or adverse effect—like HHL—is not

necessary to a finding of reliability under Federal Rule of Evidence 702 and *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579 (1993). *See Daubert*, 509 U.S. at 590 (“Of course, it would be unreasonable to conclude that the subject of scientific testimony must be ‘known’ to a certainty; arguably, there are no certainties in science.”); *Jones v. Otis Elevator Co.*, 861 F.2d 655, 662 (11th Cir. 1988) (stating that “absolute certainty” is “not required” for expert testimony). Rather, an expert need only offer a biologically plausible explanation that is derived from and supported by existing scientific knowledge and reasoning, as opposed to conjecture or speculation. *See Allison v. McGhan Med. Corp.*, 184 F.3d 1300, 1319 n.23 (11th Cir. 1999); *Jones*, 861 F.2d at 662. **The fact that there may be ongoing research or debate in the scientific community as to the pathophysiological mechanism underlying a condition does not preclude admission of an expert's biological plausibility opinion. *See In re Johnson & Johnson Talcum Powder Prod. Mktg., Sales Prac. & Prod. Liab. Litig.*, 509 F. Supp. 3d 116, 174 (D.N.J. 2020). So long as there is reliable evidentiary support demonstrating that the expert's proposed mechanism is at least plausible, disputes over the relative merits of his opinion “should be tested by the adversary process—competing expert testimony and active cross-examination—rather than excluded from a jury's scrutiny.” *See In re Neurontin Mktg., Sales Prac., & Prod. Liab. Litig.*, 612 F. Supp. 2d 116, 159 (D. Mass. 2009).**

In re 3M Combat Arms, 2021 WL 4132269, at *2 (emphasis added). *See also Brumley v. Pfizer, Inc.*, 200 F.R.D. 596, 600 (S.D. Tex. 2001) (under *Daubert*, a trial judge need not and should not determine the scientific validity of the conclusions offered by an expert witness; rather, to decide admissibility the judge should consider only the soundness of the general scientific principles or reasoning on which the expert relies and the propriety of the methodology applying those

principles to the specific facts of the case), *citing Watkins v. Telsmith, Inc.*, 121 F.3d 984 (5th Cir.1997).

To be sure, pitch matching is only one test utilized by Dr. Gianoli to assess the plaintiff's tinnitus. Dr. Gianoli administered pure tone air and bone conduction tests; tympanometry tests; ipsilateral and contralateral acoustic reflex tests; tinnitus loudness matching; a Residual Inhibition Assessment; a Tinnitus Handicap Inventory; and a Tinnitus Functional Index. Thus, pitch matching was only one test among many conducted to diagnose and treat the plaintiff's tinnitus. After a review of the law and evidence in this matter, the undersigned concludes that Dr. Gianoli had adequate support for his opinions regarding the level of tinnitus experienced by the plaintiff. Therefore, the undersigned concludes that the 8,000 Hz file, and Dr. Gianoli's testimony concerning the test results, is reliable.

Second, this Court must determine whether the 8,000 Hz file is relevant, that is, whether it can be properly applied to the facts in this case. Rule 401 of the Federal Rules of Evidence states that evidence is relevant "if it has any tendency to make a fact more or less probable than it would be without the evidence" and "the fact is of consequence in determining the action." Fed. R. Evid. 401. The plaintiff argues that the 8,000 Hz file will assist the Court in understanding trial testimony

regarding the frequency of the tinnitus pitch that the plaintiff has experienced post-incident, which will aid the Court in determining and understanding the nature, extent, and severity of the plaintiff's injuries and damages. The undersigned agrees. Unlike the YouTube video, Dr. Gianoli will testify to explain the purpose of the test, its parameters, and his understanding and evaluation of the results of the testing. The undersigned concludes that this testimony will be helpful to the trier of fact in determining the issue of causation in this matter, and the extent of the plaintiff's injuries.

Finally, the undersigned is mindful that the gatekeeping safeguards provided for in *Daubert* are not as essential in a case such as this where a district judge sits as the trier of fact in place of a jury. *See, e.g., Gibbs v. Gibbs*, 210 F.3d 491, 500 (5th Cir. 2000). Any questions about the test as it was administered, and the reliability thereof, can be addressed by defense counsel on cross examination. Thus, because the 8,000 Hz file reflects a widely-used, scientific test to measure the degree and severity of tinnitus, and because Dr. Gianoli's testimony concerning that testing will assist the trier of fact, under Rule 702 and *Daubert*, the 8,000 Hz file, and Dr. Gianoli's testimony concerning the file, are admissible.

CONCLUSION

Thus, for the foregoing reasons, the Motion in Limine to Exclude YouTube Videos of Other Bottles Exploding [Doc. 30] is GRANTED and the Motion in Limine to Exclude Certain Video Audio Samples [Doc. 31] is DENIED.

Signed at Lafayette, Louisiana, this 8th day of August, 2022.

A handwritten signature in black ink, appearing to read "Carol B. Whitehurst".

CAROL B. WHITEHURST
UNITED STATES MAGISTRATE JUDGE